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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/078,742	02/19/2002	David Neil Slatter	30004064-2	4921

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EXAMINER	
YE, LIN	

ART UNIT	PAPER NUMBER
2622	

DATE MAILED: 07/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/078,742	SLATTER ET AL.	
	Examiner	Art Unit	
	Lin Ye	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 April 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8,10-14 and 18-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8,10-14 and 18-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicants' arguments filed on 4/24/2006 have been fully considered but they are not persuasive as to claims 1-8, 10-14 and 18-22

For claims 1, 18 and 19, the applicants argue that the proposed combination of Fitch and Lin references is not obvious and the rejection should be withdrawn, because "the fastening mechanism taught by Lin seems to teach against the type of fastening mechanism that Fitch suggests should be used for its liquid crystal display. When Fitch is so obviously concerned with securing the liquid crystal display to garment to pr4otect the device an to prevent theft..." (See Applicant's REMARKS page 7, lines 17-23, page 9, lines 19-25 and page10, lines 26-32).

The examiner disagrees. The Fitch reference never states the garment electronic apparatus cannot use other type of fastening mechanism, such as pins engaged in to clips. The Fitch's garment electrical apparatus including a plurality type electrical devices, LCD, input devices (e.g., video camera 40, video recorder 38, video tuner 36, see Col. 3, lines 40-44 and Col. 4, lines 31-33). The GPS system is built into the garment to provide security against theft. The GPS system is nothing to do with choosing what type of fastening mechanism for securing the electronic device on the garment (cloth). The Lin reference teaches using pins to secure the electronic device (e.g., electronic badge) on the garment. The both Fitch reference and Lin reference teach a analogue art for securing the electronic device

on the garment. Therefore, The Lin reference is evidence that one of ordinary skill in the art at the time to see more advantages the wearable electronic device using an electrically conducting connection pin to secure the front and the rear portions so that wearer can easily attach or detach both front and rear portions of device from cloth (See Col. 2, lines 50-64, Figures 3 and 7). For that reason, it would have been obvious to one of ordinary skill in the art to modify the wearable device of Fitch by providing an electrically conducting connection pin to secure the front and the rear portions as taught by Lin.

For claim 5, the applicant argues that Fitch in view of Lin fails to teach or suggest claim 5 (See Applicant's REMARKS page 8, lines 10-17).

The examiner disagrees. The claim 5 is only required the front portion comprises an image capture means, and the front portion is external to the jacket ("worn outside a wearer's clothing" as recited in claim 1). For this reason, the Fitch reference clearly discloses in which the front portion comprises an image capture means (e.g., miniature video camera considered as the front portion is external to the jacket and electronically connected to the control section as microcontroller 22 which included in the rear portion as shown in Figure 6, See Col. 3, lines 40-42 and Col. 5, lines 35-46).

2. Applicant's arguments with respect to the new claim 23 filed on 4/24/06 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 4-7, 21, 8, 13-14, 18-20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fitch U.S. Patent 5,912,653 in view of Lin U.S. Patent 4,965,705.

Referring to claim 1, the Fitch reference discloses in Figures 2A-B and 6, a wearable electromagnetic (EM) radiation transmitter/receiver (e.g., a garment with any type of electronic devices as LCD, **miniature cameras**, computers, etc... all signals can be set to a **broadcast frequency** allowing other receiving jackets operation on the same frequency to access by transmitter 72, antenna 70, see Col. 4, lines 35-40) comprises a front portion and a rear portion, wherein the front portion includes transmission and reception section and is adapted to be worn outside a wearer's clothing (e.g., video tuner 36, video camera 40, audio output devices, input devices, etc... are external to the jacket, see Col. 3, lines 40-50), and wherein the rear portion includes a control section and is worn inside at least part of the wearer's clothing (e.g., microcontroller 22 is in the jacket as shown in 2A-2B, see Col. 5, lines 9-18), the front and rear portions being operable to communicate electrically with one another, and are physically connected to one another (by a fastener lock configuration 16), and to secure the front (electronic devices as LCD, miniature cameras, etc...) and the rear portion (microcontroller 22) in position on a wearer's clothing (one aperture 14 in the jacket). However, the Fitch reference does not explicitly show " a means to secure" as using an

electrically conducting connection pin configured when in use to be operable through a thickness of the wearer's clothing between the front and the rear portion instead of fastener lock.

The Lin reference teaches in Figure 3, an electronic jewelry (has a heart shape) including an electrically conducting connection pin (33) to secure the front and the rear portion in position on a wearer's clothing, the securing means being configured when in use to be operable through a thickness of the wearer's clothing between the front and the rear portion (e.g., the pin 33 is in use to be operable for supplying electric power from the rear poriton to the front portion. See Col. 2, lines 50-64, Figures 3 and 7). The Lin reference is evidence that one of ordinary skill in the art at the time to see more advantages the wearable electronic device using an electrically conducting connection pin to secure the front and the rear portions so that wearer can easily attach or detach both front and rear portions of device from cloth. For that reason, it would have been obvious to one of ordinary skill in the art to modify the wearable device of Fitch ('653) by providing an electrically conducting connection pin to secure the front and the rear portions as taught by Lin ('705).

Referring to claim 4, the Fitch and Lin references disclose all subject matter as discussed with respected to claim 1, and the Fitch reference discloses the control section (microcontrollers 22) of the rear portion controls the transmission and reception sections (See Col. 5, lines 9-54).

Referring to claim 5, the Fitch and Lin references disclose all subject matter as discussed with respected to claim 1, and the Fitch reference discloses in which the front portion

comprises an image capture means (miniature video camera, See Col. 3, lines 40-42 and Col. 5, lines 35-46).

Referring to claim 6, the Fitch and Lin references disclose all subject matter as discussed with respected to claim 6, and the Fitch reference discloses in which the rear portion includes control means (microcontrollers 22) for the image capture means (by video switch 30, see Col. 3, lines 34-44).

Referring to claim 7, the Fitch and Lin references disclose all subject matter as discussed with respected to claim 1, and the Fitch reference discloses in which the rear portion also includes storage means (image memory 26, see Col. 3, lines 30-31) for storage of captured images as shown in Figures 2A-B.

Referring to claim 21, the Fitch and Lin references disclose all subject matter as discussed with respected to claim 1, and the Lin reference discloses wherein the securing means comprises a pin (see Col. 2, lines 49-55).

Referring to claim 8, the Fitch and Lin references disclose all subject matter as discussed with respected to claim 21, and the Lin reference discloses in which the pin (33) is electrically conducting (pin 33 connecting power source 4, see Col. 2, lines 54-56).

Referring to claim 13, the Fitch and Lin references disclose all subject matter as discussed with respected to claim 1, and the Lin reference discloses in which the front portion (1) is incorporated into a piece of jewelry (e.g., having a heart shape).

Referring to claim 14, the Fitch and Lin references disclose all subject matter as discussed with respected to claim 1, and the Fitch discloses in which the transmitter/receiver has a plurality of different front portions all being differently shaped to blend with, or be

suitable with, a wearer's clothing all being operable to be used with the same rear portion (e.g., the microcontroller 22 in the rear portion can be used control any types of electronically device such as LCD, camera, video tuner , transmitter, computer, etc...suitable with a wearer's clothing, see Col. 5, lines 20-40).

Referring to claim 18, the Fitch and Lin references disclose all subject matter as discussed with respected same comments to claim 1.

Referring to claim 19, the Fitch and Lin references disclose all subject matter as discussed with respected same comments to claim 1.

Referring to claim 20, the Fitch and Lin references disclose all subject matter as discussed with respected to claim 1, and the Fitch reference discloses wherein the securing means extends through the wearer's clothing between the front and rear potions as shown in Figures 2A-B.

Referring to claim 22, the Fitch and Lin references disclose all subject matter as discussed with respected to claim 1, and the Fitch reference discloses the front and the rear portions are operable to communicate through inductive coupling as shown in Figures 2A-B and 6.

5. Claims 2 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fitch U.S. Patent 5,912,653 in view of Lin U.S. Patent 4,965,705 and Brett U.S. Patent 3,141,216.

Referring to claim 2, the Fitch and Lin references disclose all subject matter as discussed with respected to claim 1, except the references do not explicitly states wherein the securing means utilizes a magnet.

The Brett reference teaches in Figure 6, providing improved magnetic fastening means for garments and the like (See Col. 1, lines 13-22). The Brett reference is evidence that one of ordinary skill in the art at the time to see more advantages utilizing a magnet for securing a device on the garments so that it can fasten the members securely and with can be easily manipulated into an out of fastening position. For that reason, it would have been obvious to one of ordinary skill in the art to modify the wearable device of Fitch ('653) by providing the securing means utilizes a magnet as taught by Brett ('216).

Referring to claim10, the Fitch and Lin references disclose all subject matter as discussed with respected to claim 8, and the Lin reference discloses in which the pin (33) projects form the front portion to be received in a corresponding opening in the back portion. The Brett reference shows the pin projects from the rear portion to be received in a corresponding opening in the front portion. This is evidence that one of ordinary skill in the art at the time to see more advantages for having more flexible options to design a pin projects either from the rear portion or front portion to be received in a corresponding in the front portion or rear portion. For that reason, it would have been obvious to one of ordinary skill in the art to modify the wearable device of Fitch ('653) by providing a pin projects either from the rear portion or front portion to be received in a corresponding in the front portion or rear portion as taught by Lin ('705) and Brett ('216).

Referring to claim 11, the Fitch, Lin and Brett references disclose all subject matter as discussed with respected to claim 21, and the Lin reference discloses in which the electrically conducting connection pin has multiple conduction paths (e.g., two pins 33 and 34 connecting with power source 4, See Col. 2, lines 47-56)

Referring to claim 12, the Fitch, Lin and Brett references disclose all subject matter as discussed with respected to claim 21, and the Lin reference discloses in which includes a plurality of electrically conducting connection pins arranged to connect the front and rear portions as shown in Figure 7.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fitch U.S. Patent 5,912,653 in view of Lin U.S. Patent 4,965,705 and Kweon U.S. Patent 6,667,771.

Referring to claim 3, the Fitch and Lin references disclose all subject matter as discussed with respected to claim 1, and the Fitch reference discloses includes a transmitter (72) for sending on broadcast frequency (radio frequency) to other receiving jackets (see Col. 4, lines 35-40). However, the Fitch reference does not explicitly states the transmitter is external to the jacket as in the front portion.

The Kweon reference teaches in Figures 1-5, a wearable electromagnetic (EM) radiation (e.g., a wearable wireless image transmission system having a small-sized camera 4 and radio frequency transmission device 14, see Col. 3, lines 30-37) transmitter/receiver ("transmitter/receiver" is considered as transmitter **or** receiver) comprises a front portion and a rear portion, wherein the front portion includes transmission/reception section and is adapted to be worn outside a wearer's clothing (e.g., the RF transmission device 14, a clip 25, a body has a trough hole 27 for lens and image sensor 4 that mounted on the upper portion 23 are consider as the front portion, see Col.3, lines 45-50; those elements are worn outside a wearer's clothing as shown in Figure 5. It should be noted the reference number of "114" in Figure 5 actually means the RF transmission device 14, see Col. 4, lines 6-12). The Kweon

reference is evidence that one of ordinary skill in the art at the time to see more advantages the transmitter and antenna adapted to be worn outside the wearer's clothing so that the strong and clear signals can be transmitted directly to the remote without obstructed by the wearer's clothing. For that reason, it would have been obvious to one of ordinary skill in the art to modify the wearable device of Fitch ('653) by providing the transmitter is external to the jacket as in the front portion as taught by Kweon ('771).

7. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fitch U.S. Patent 5,912,653 in view of Lin U.S. Patent 4,965,705 and Kakita U.S. Patent 5,014,079.

Referring to claim 23, the Fitch and Lin references disclose all subject matter as discussed with respected to claim 5. However, the Fitch reference does not explicitly states the image capture means (miniature video camera) is triggered to capture an image in response to detecting laughter.

The Kakita reference teaching a camera is triggered to capture (release operation) an image in response to detecting laughter (See Col. 1, lines 5-18). The Kakita reference is evidence that one of ordinary skill in the art at the time to see more advantages the camera system can be triggered to capture an image in response to detecting laughter so that all the participants including a person serving as a photographer can enjoy a banquet or a party. For that reason, it would have been obvious to one of ordinary skill in the art to modify the camera device of Fitch ('653) by providing an automatically image capturing function for capturing image in response to detecting laughter as taught by Kakita ('079).

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lin Ye whose telephone number is (571) 272-7372. The examiner can normally be reached on Mon-Fri 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lin Ye
Examiner
Art Unit 2615

July 6, 2006